

CLAIMS:

1. A magnetic head, particularly meant for use in a magneto-optical device, which head includes an at least substantially flat magnetic coil having at least one coil layer structure comprising an electrically conductive winding, and further includes a permanent-magnet layer structure extending substantially parallel to the coil layer structure and having an in-plane magnetic axis.

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2. A magnetic head as claimed in Claim 1, the magnetic coil having a central area and the conductive winding extending around the central area, wherein the permanent-magnet layer structure includes two flat permanent magnets located at opposite sides of the central area of the magnetic coil.

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3. A magnetic head as claimed in Claim 1, the magnetic coil having a central area and the conductive winding extending around the central area, wherein the permanent-magnet layer structure includes a permanent magnet located in the central area.

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4. A magnetic head as claimed in Claim 1 and having a head face which extends at least partly parallel to the coil layer structure, wherein the permanent-magnet layer structure is situated at a side of the coil layer structure, which side is remote from the head face.

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5. A magnetic head as defined in Claim 1 and having a head face which extends at least partly parallel to the coil layer structure, wherein the permanent-magnet layer structure is situated at a side of the coil structure, which side is situated nearer the head face.

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6. A magnetic head as defined in Claim 1 and having a head face which extends at least partly parallel to the coil structure, wherein the permanent-magnet layer structure and the coil layer structure are situated in one plane, the coil layer structure extending between at least two permanent magnets of the permanent-magnet layer structure.

7. A magnetic head as claimed in Claim 1, including a soft magnetic layer structure which extends substantially parallel to the coil layer structure.

8. A magnetic head as claimed in Claim 7, wherein the coil layer structure extends between the permanent-magnet layer structure and the soft magnetic layer structure.

9. A magnetic head as claimed in Claim 8 and having a head face which extends at least partly parallel to the coil layer structure, wherein the soft magnetic layer structure is situated at a side of the coil layer structure, which side is remote from the head face.

10. A magnetic head as claimed in Claim 1, wherein the permanent-magnet layer structure is a laminated layer structure having at least one electrically non-conductive intermediate layer.

11. A slider for use in a magneto-optical device and including the magnetic head as claimed in any one of the preceding Claims.

12. A slider as claimed in Claim 11, having a slider-body with which the magnetic head is integrated.

13. An optical recording and/or reproducing head having an objective provided with the magnetic head as claimed in any one of the Claims 1 to 10.

14. A magneto-optical device including the magnetic head as claimed in any one of the Claims 1 through 10, or including the slider as claimed in Claim 11 or 12, or including the optical head as claimed in Claim 13.

15. A method of reading out information present in a track of a magneto-optical storage medium having magnetostatically coupled or exchange coupled layers by means of a laser spot and an external magnetic field, wherein use is made of a permanent magnet for generating a magnetic field component in said medium in a direction of the track.

16. A method as claimed in Claim 15, wherein use is made of the magneto-optical device as claimed in Claim 14.